

# Review of Availability

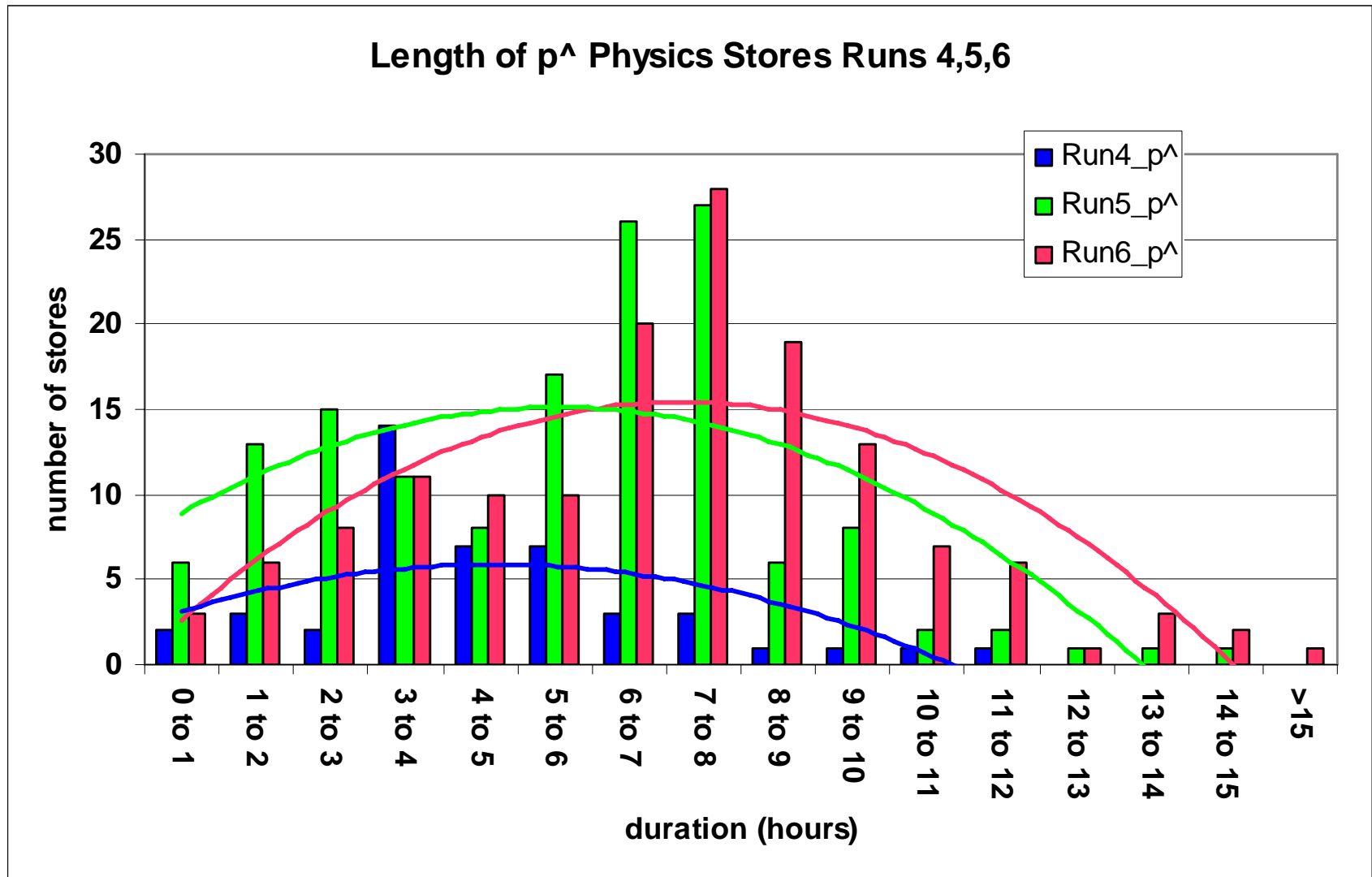
## Run6, Run5, Run4

by Peter Ingrassia

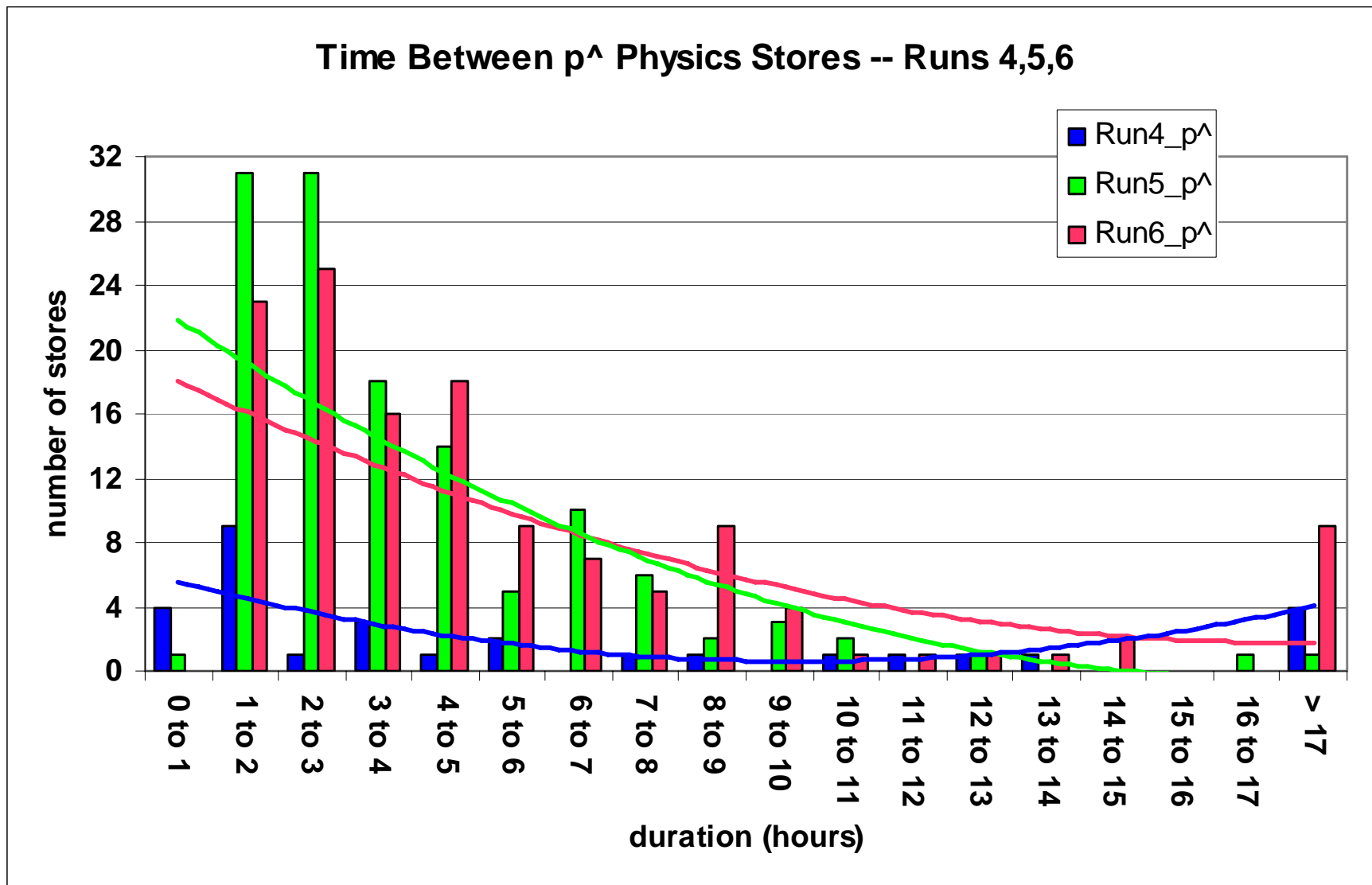
# The Presentation – Can we identify Trends?

- For Proton Operation at 100 GeV
  - A look at store length during last 3 P<sup>+</sup> runs
  - A look at time between stores last 3 P<sup>+</sup> runs
  - A look at (user) Availability last 3 P<sup>+</sup> runs
  - In Contrast a look at (DOE) Availability
- Top 10 (failure) List for the last three YEARS (including ion operation and operation at energies other than 100 GeV)

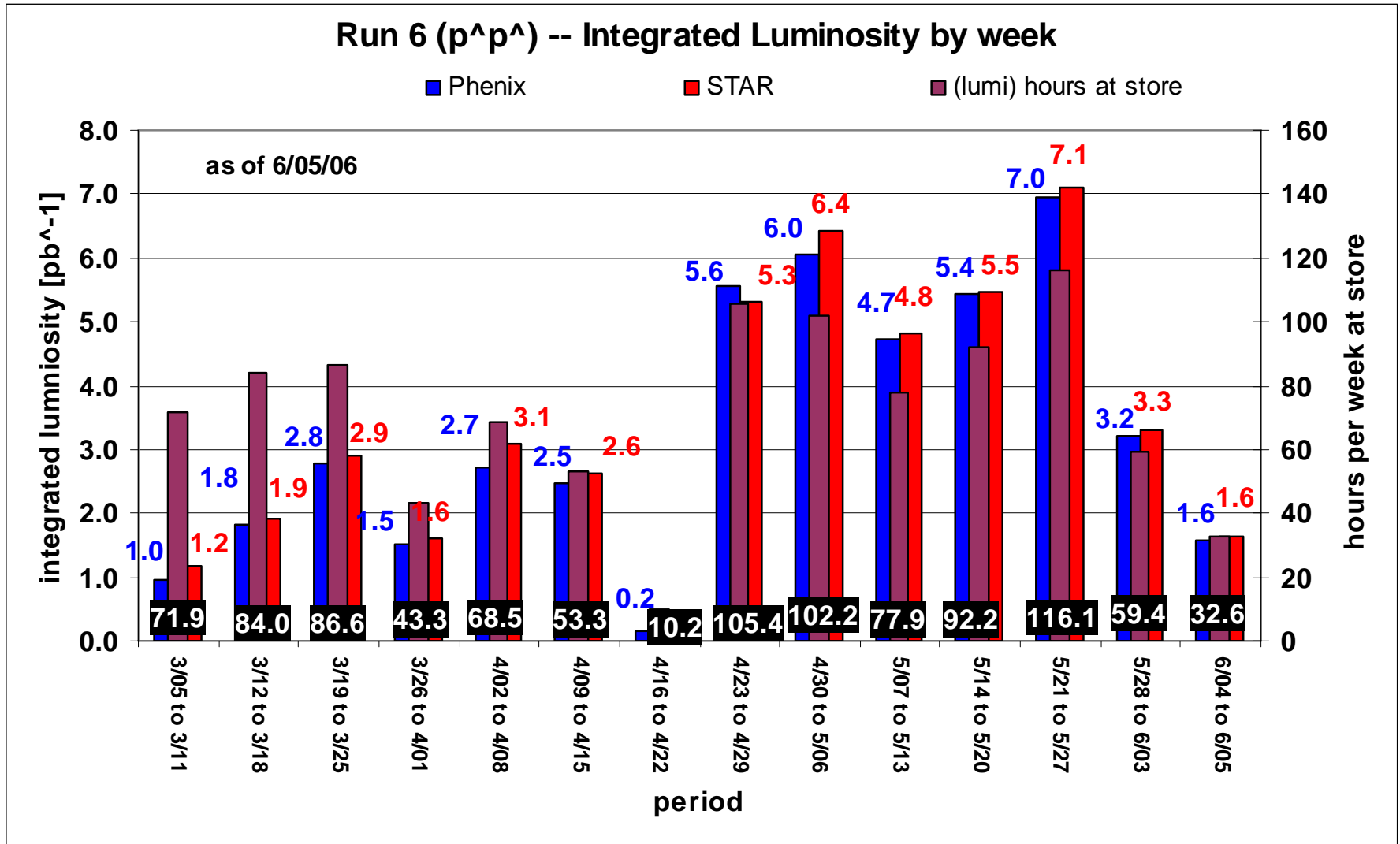
# Run6 Stores lasted longer than Run5



# Time Between Stores longer for Run6 than Run5

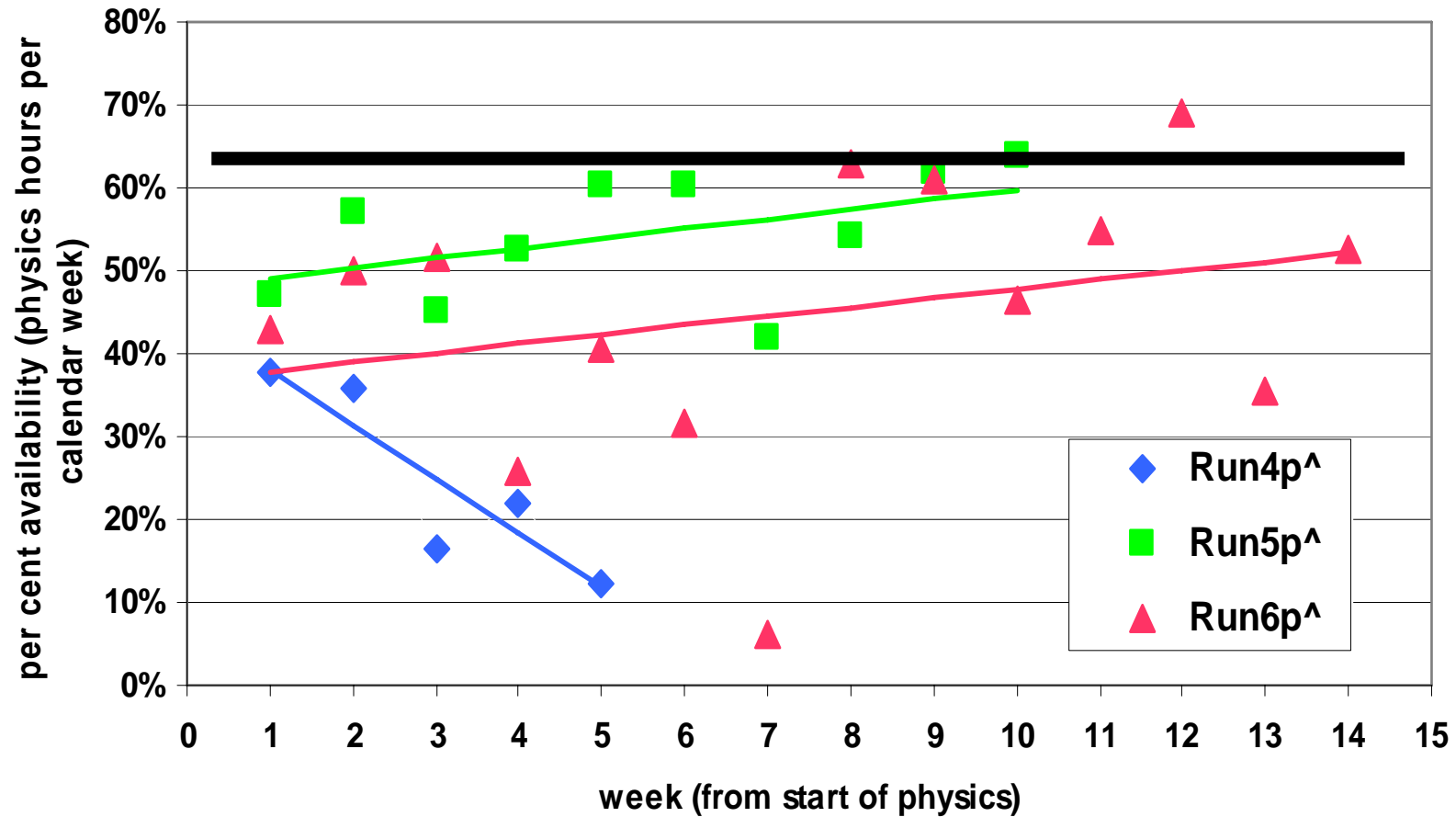


# Availability arithmetic – where the hours come from



# Run6 Availability Less than Run5

Availability for Physics -- p<sup>+</sup> Operations -- Runs 4,5,6



# “DOE” Availability

	ALL04	AuAu	p^p^	ALL05	CuCu	p^p^	ALL06	p^p^
fiscal year	FY04	FY04	FY04	FY05	FY05	FY05	FY06	FY06
RHICRefrigerator hours	4368	3336	1031	5328	3024	2280	3576	3576
physics	1124	1046	77	1564	787	776	1069	1069
machine development	487	92	394	718	325	393	851	851
beam studies	136	128	8	158	70	88	129	129
machine setup	1285	1061	225	1278	757	521	655	655
experimenter setup	153	83	71	144	86	58	120	120
failure	791	616	176	696	395	301	699	699
maintenance	287	207	80	702	575	128	227	227
Scheduled Shutdown	0	0	0	101	65	36	157	157
Unscheduled Shutdown	0	0		14	12	2	119	119
Total hours	4264	3233	1031	5313	3012	2301	4025	4025
availability =	80.1%	79.6%	81.5%	84.7%	83.7%	85.9%	80.2%	80.2%

# Top 10 (failure) List    fy04 - fy06

FY04		
Rank	System	total Hours
1	Controls	134.9
2	Quench	66.3
3	Cryogenic	66
4	RHIC Blue Rf	42.3
5	QPA	34
6	Services Electrical	34.8
7	Tandem MP7	30.4
8	RHIC Blue PS	30.8
9	RHIC Yellow Rf	29.3
10	RHIC Yellow MainMagPS	29.7

FY05		
Rank	System	total hours
1	Controls	69.2
2	RHIC Blue PS	50.2
3	QuenchProtectionAssembly	42.6
4	Cryogenic	41.0
5	Human Error	32.5
6	AccessControls	29.7
7	AGS_RF	27.4
8	Quench	26.2
9	RadaitionInterlock	23.3
10	ServicesWater	22.8

FY06		
Rank	System	total hours
1	Controls	67.2
2	AccessControls	43.9
3	RHIC Blue PS	42.2
4	Linac Rf	31.2
5	Human Error	29.9
6	RHIC Yellow PS	28.6
7	AtR/WXY elements	27.2
8	BtA	27.1
9	Services Electrical	26.2
10	Cryogenic	25.5